



8 December 2008

Operation of the Defense Acquisition System

Statutory and Regulatory Changes

Sam Fazio
DAU Midwest Region
20 May 2009
salvatore.fazio@dau.mil
|
(937) 781-1064

The Revised DoDI 5000.02

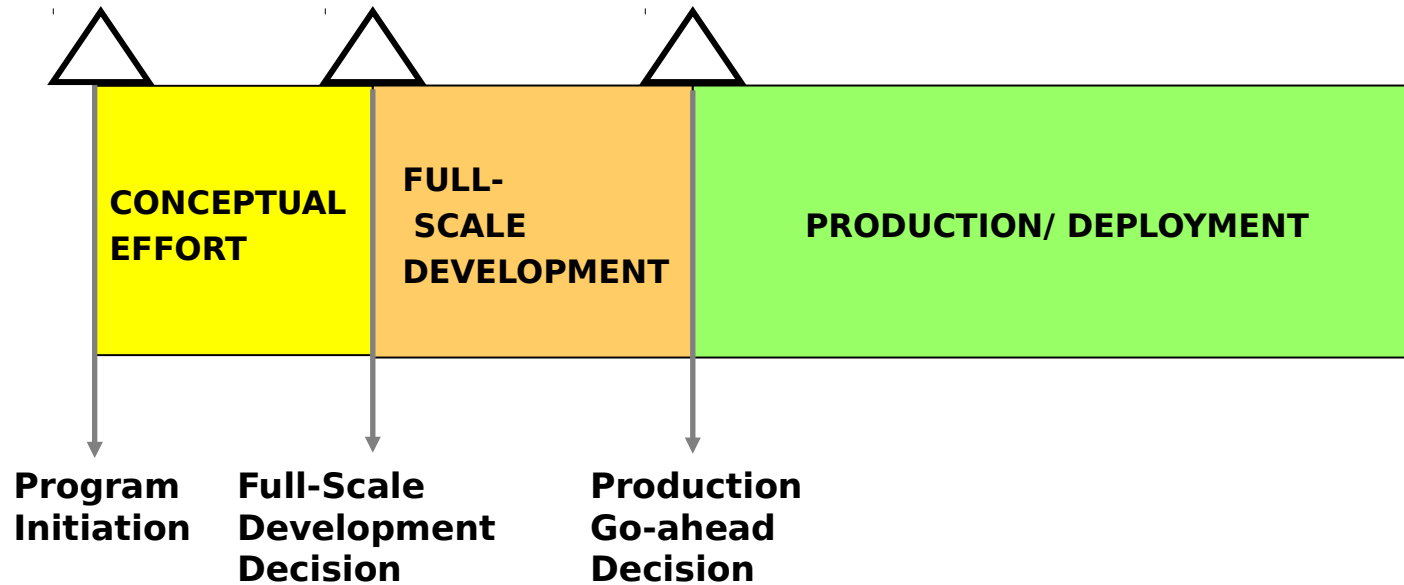
Topics:

- Changes in Defense Acquisition System: 2003 vs. 2008
- The Defense Acquisition System Phases
- New policy directed by Congress
- New or revised regulatory policy
- Enclosures
 - Statutory/Regulatory Requirements; IT Considerations; T&E; Resource Estimation; Human Systems Integration; Acquisition of Services; Program Management; Business Systems;

Source of Changes

- Policy from numerous new/revised sections of Public Law since 2003 (some with multiple requirements)
- Approved policy appearing in over 25 policy memos and DoD responses to the GAO, IG, and Congress
- Reference to 10 updated or newly issued DoD publications
- Consideration of over 700 Defense Acquisition Policy Working Group (DAPWG) comments

First Acquisition Framework in 1971

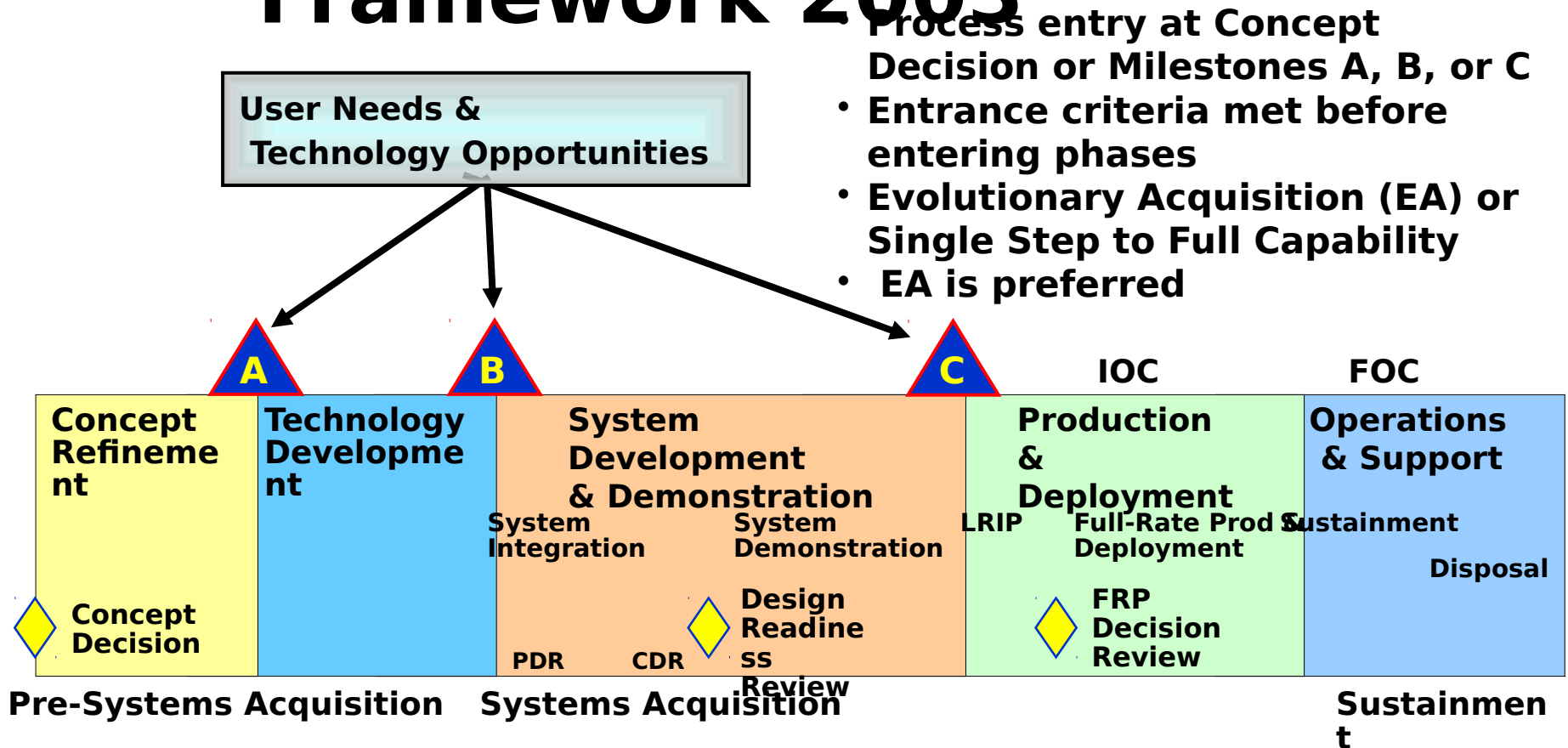


Decision points: 3

Phases: 3

Milestone documents: 1 (Decision Coordinating Paper (DCP))

Defense Acquisition Framework 2003

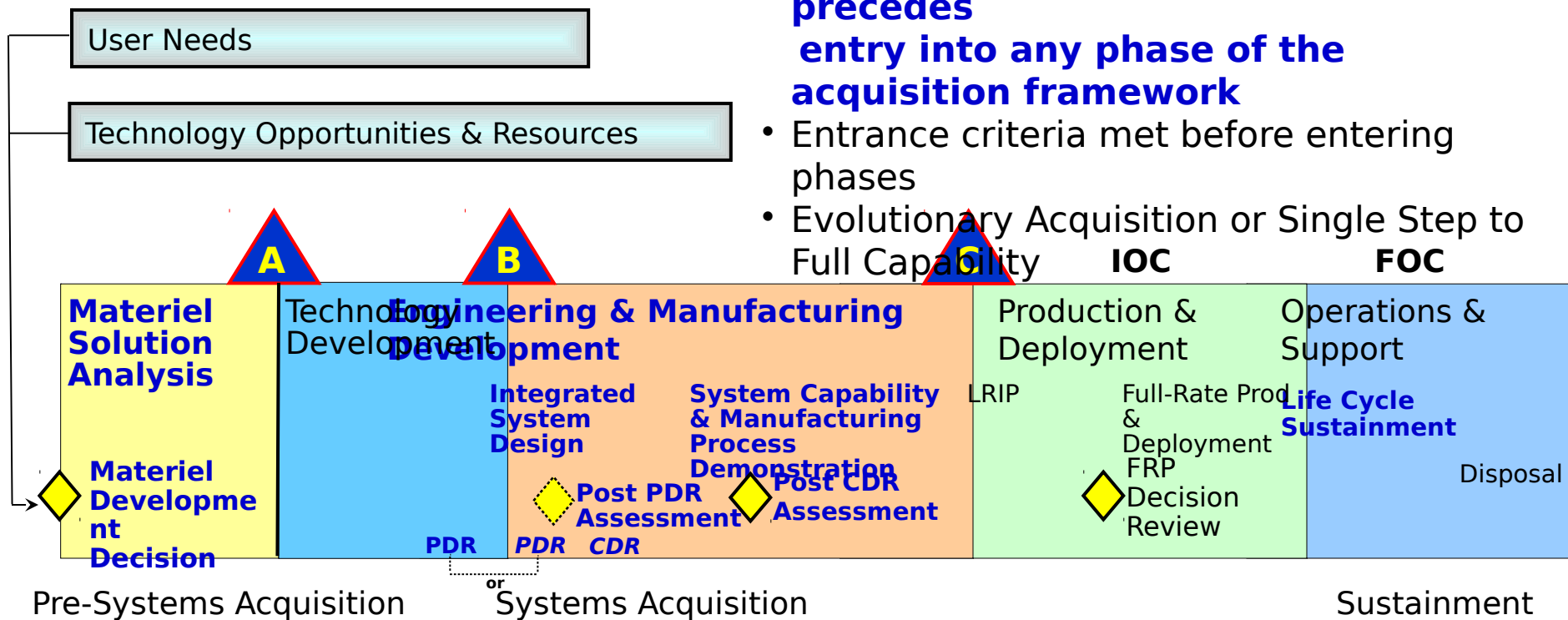


- Process entry at Concept Decision or Milestones A, B, or C
- Entrance criteria met before entering phases
- Evolutionary Acquisition (EA) or Single Step to Full Capability
- EA is preferred

- **Decision points: 6**
- **Phases: 5**
- **Milestone documents: 30+**

Defense Acquisition System

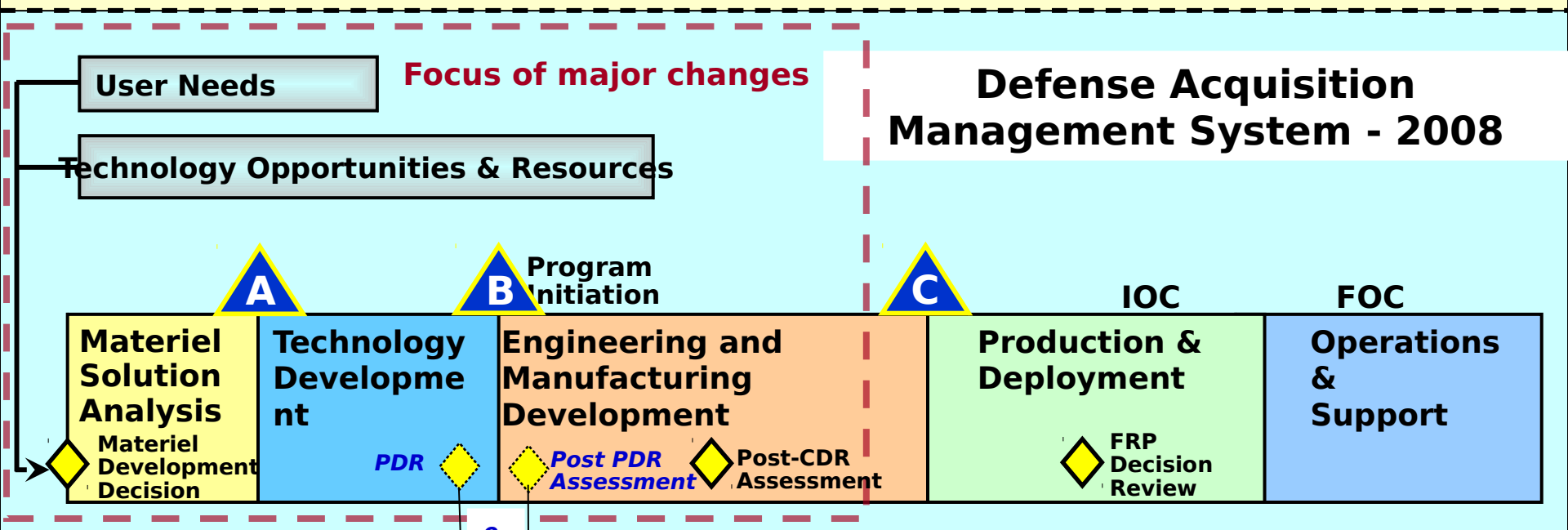
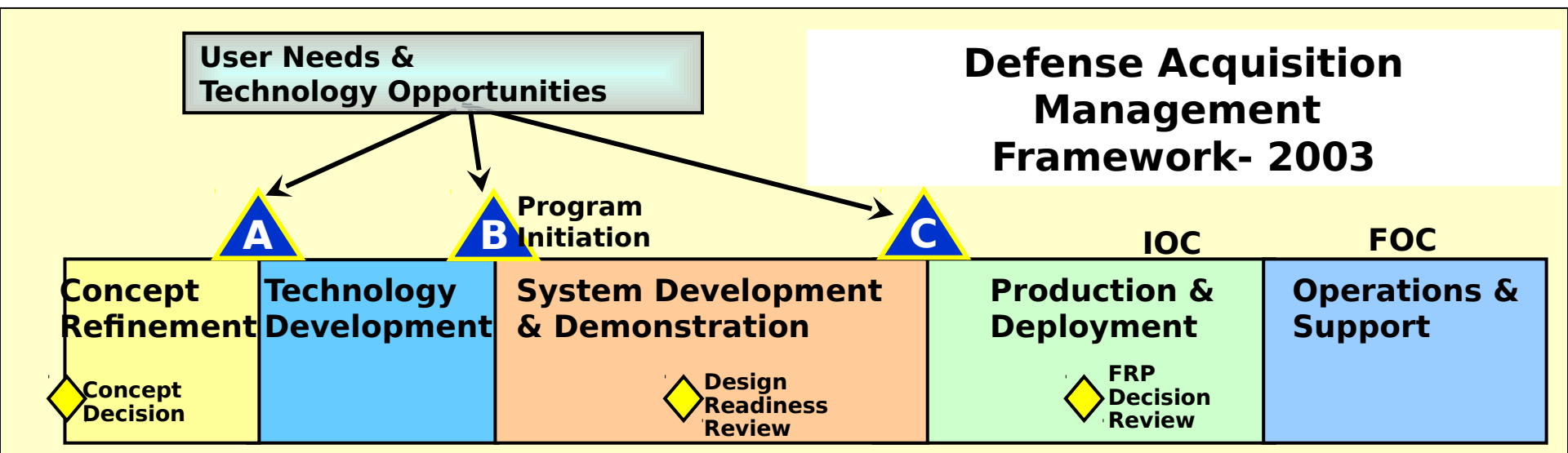
2008



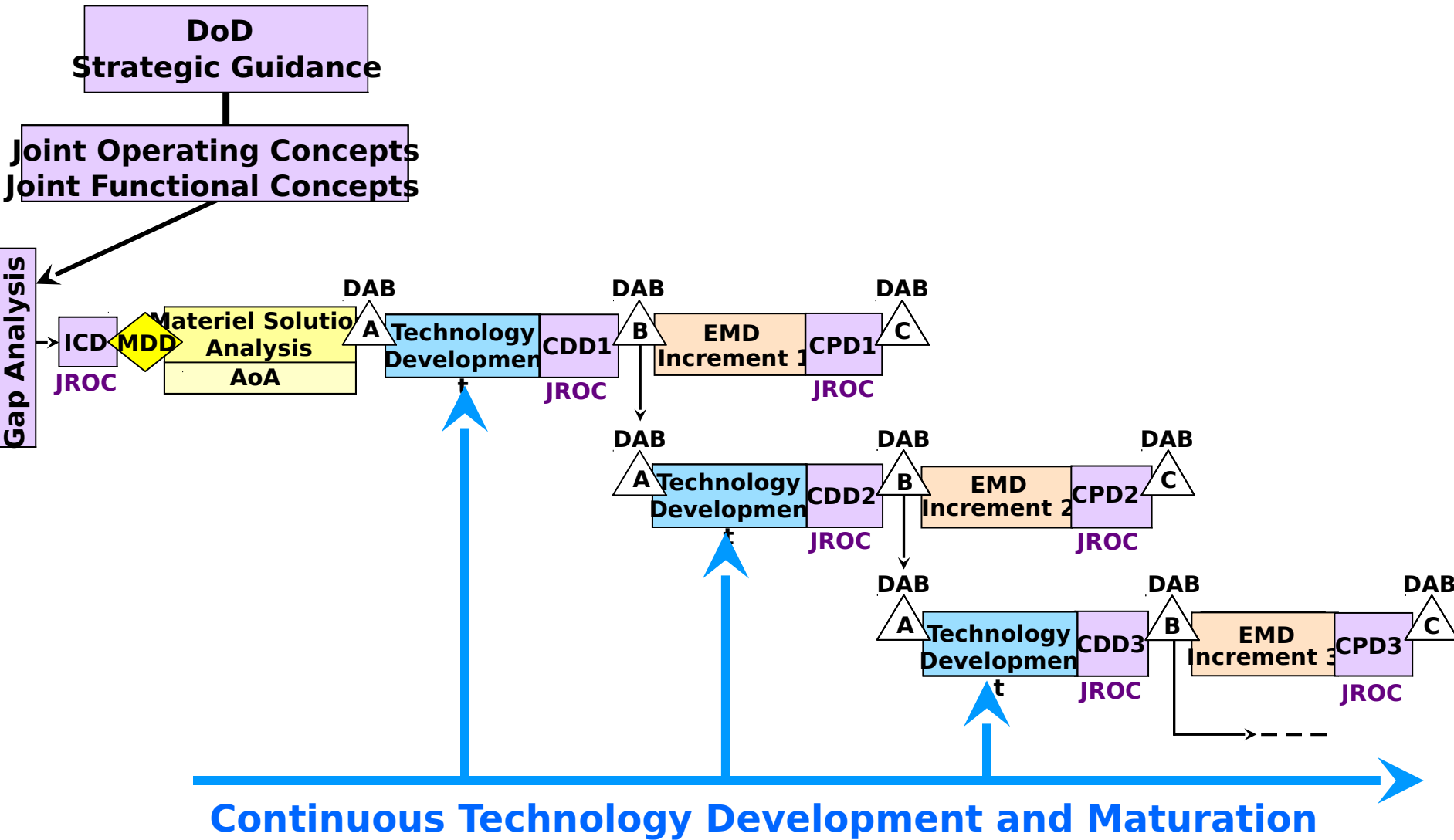
- **The Materiel Development Decision precedes entry into any phase of the acquisition framework**
- Entrance criteria met before entering phases
- Evolutionary Acquisition or Single Step to Full Capability

- **Decision points: 6**
- **Phases: 5**
- **Milestone documents: 40+**

Comparison of 2003 vs. 2008



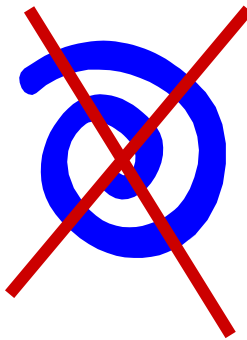
Evolutionary Approach



Evolutionary Acquisition

From two processes...—————>To one process...

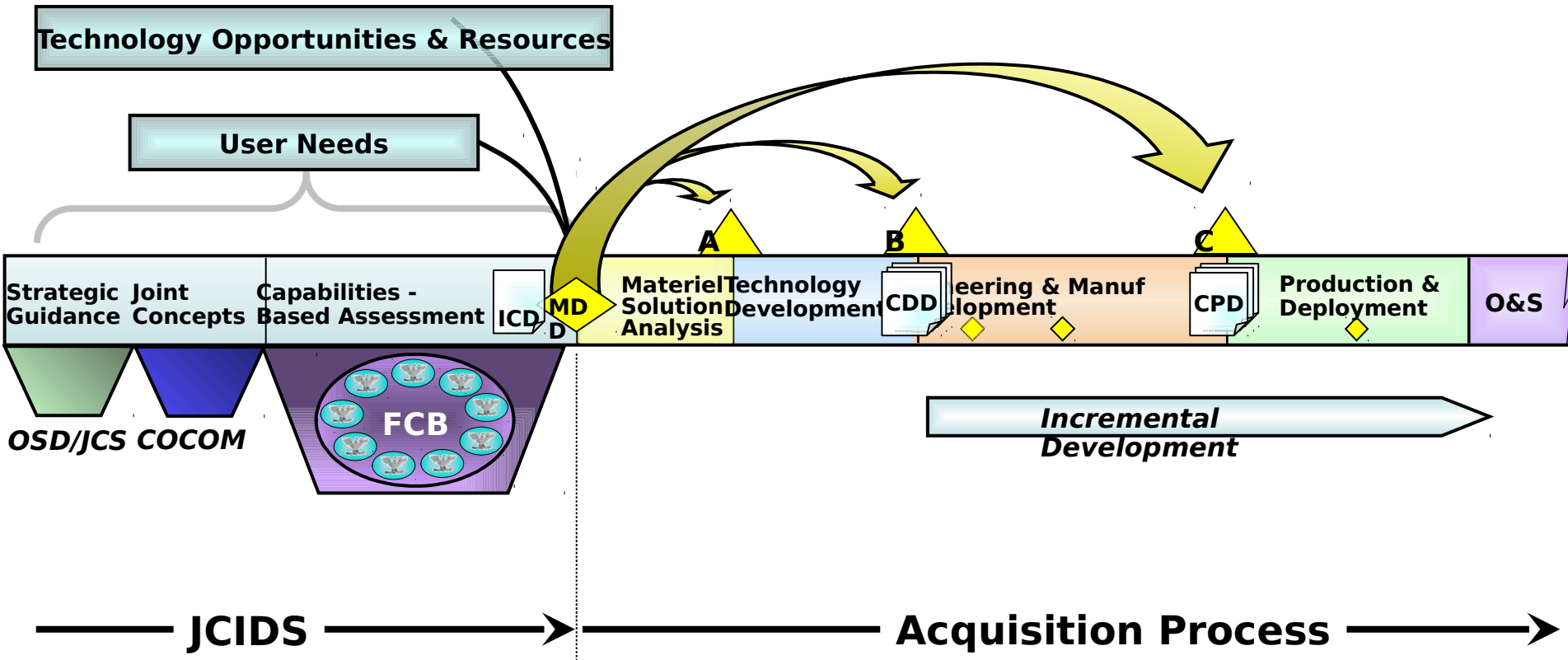
- Incremental Development: End-state is known; requirements met over time in several increments
- Spiral Development: End-state is not known; requirements for increments dependent upon technology maturation and user feedback.



No spirals!

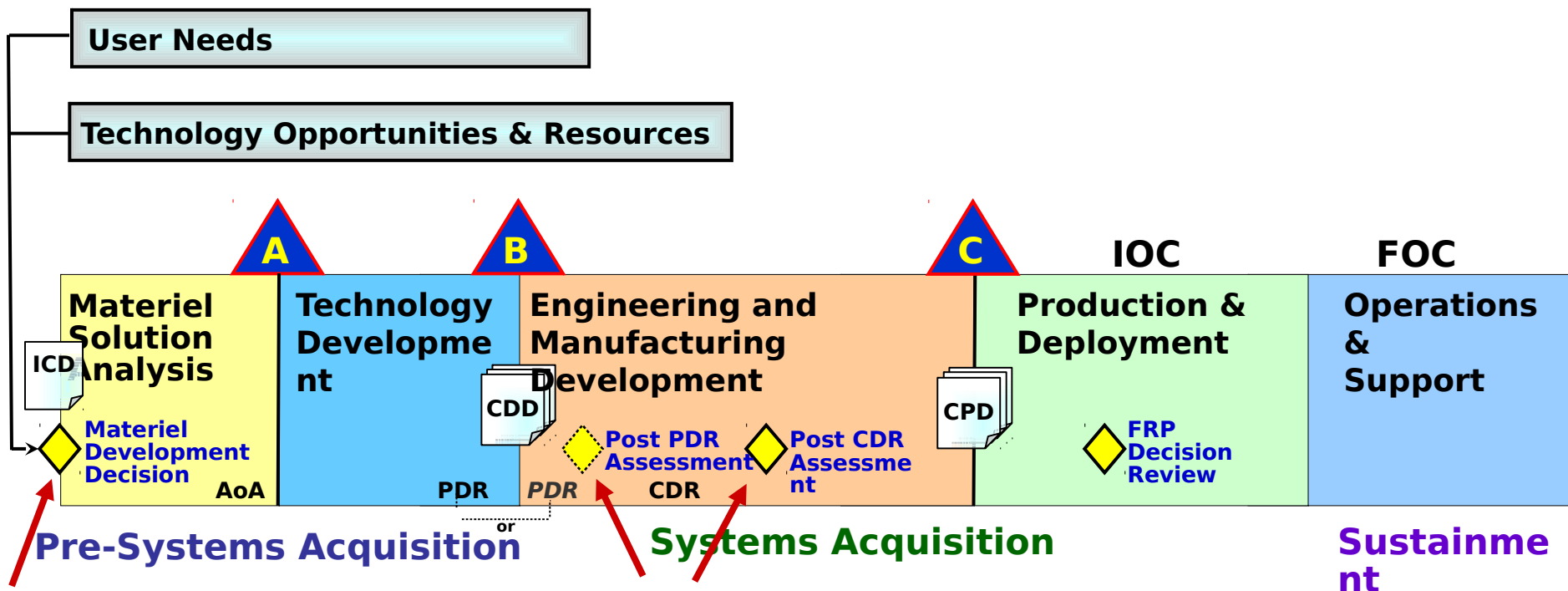
- Capability delivered in increments, recognizing up front need for future capability improvements
- Each increment:
 - depends on mature technology
 - is a militarily useful and supportable operational capability
 - Successive Technology Development Phases may be needed to mature technology for multiple increments

Determining the Appropriate Entry Point



“Following the Materiel Development Decision (MDD), the MDA may authorize entry into the acquisition management system at any point consistent with phase-specific entrance criteria and statutory requirements.”

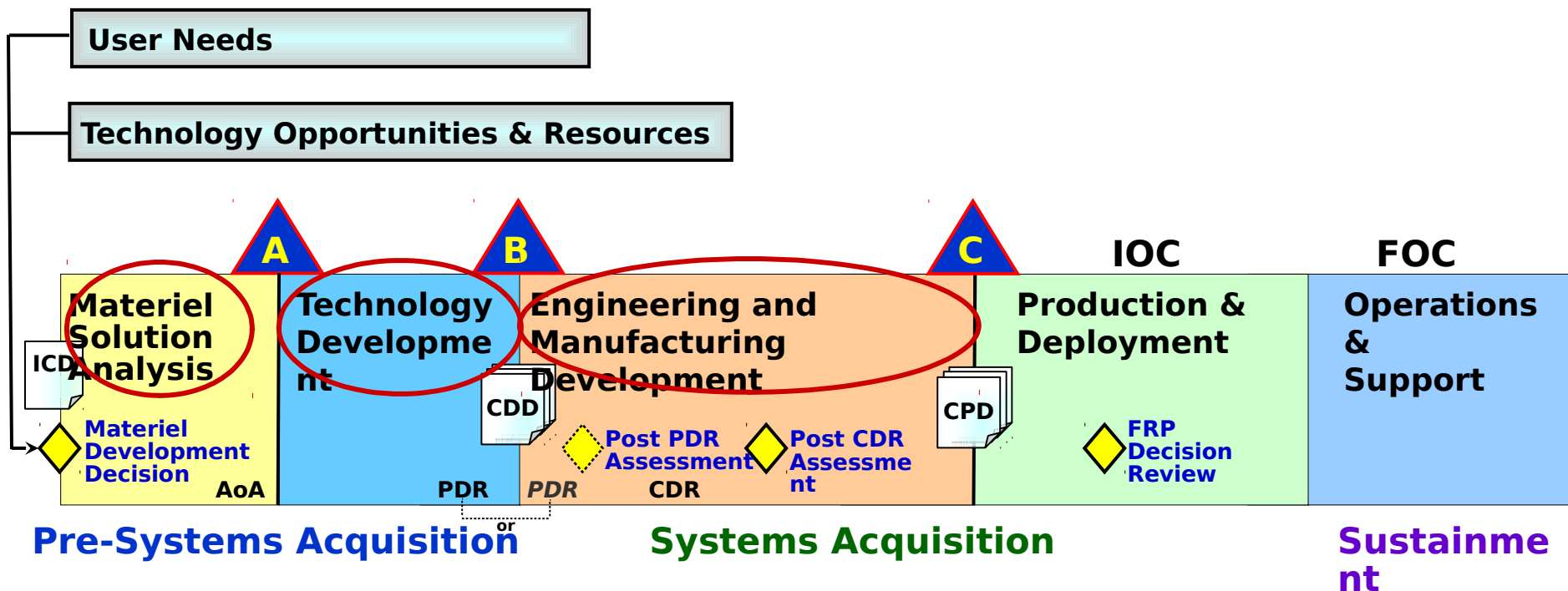
Changes to Decision Points



Changes to Decision Points

Old (2003)	New (2008)	Change from 2003
Concept Decision (CD)	Material Development Decision (MDD)	MDD required prior to entering the process at any point
N/A	Post-PDR Assessment	MDA's assessment of PM's PDR Report (if PDR after MS)
Design Readiness Review DRR	Post-CDR Assessment	MDA's assessment of PM's CDR Report

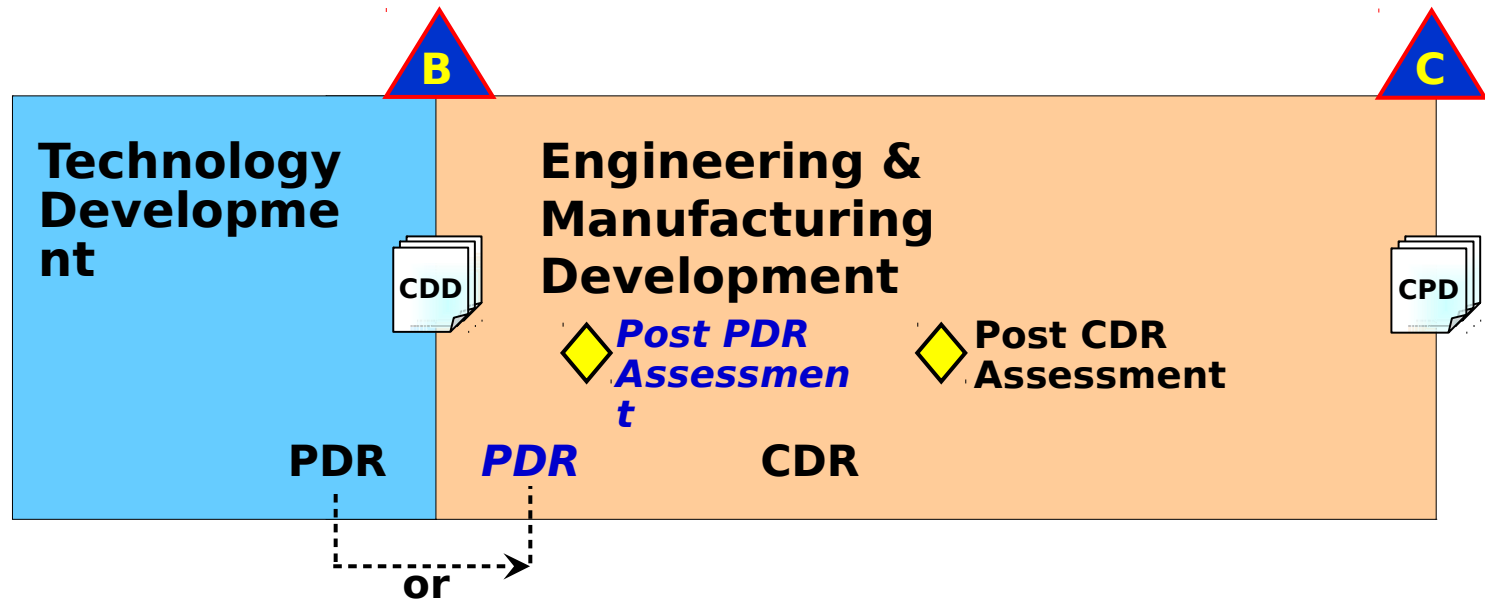
Changes to Phases



Changes to Phases

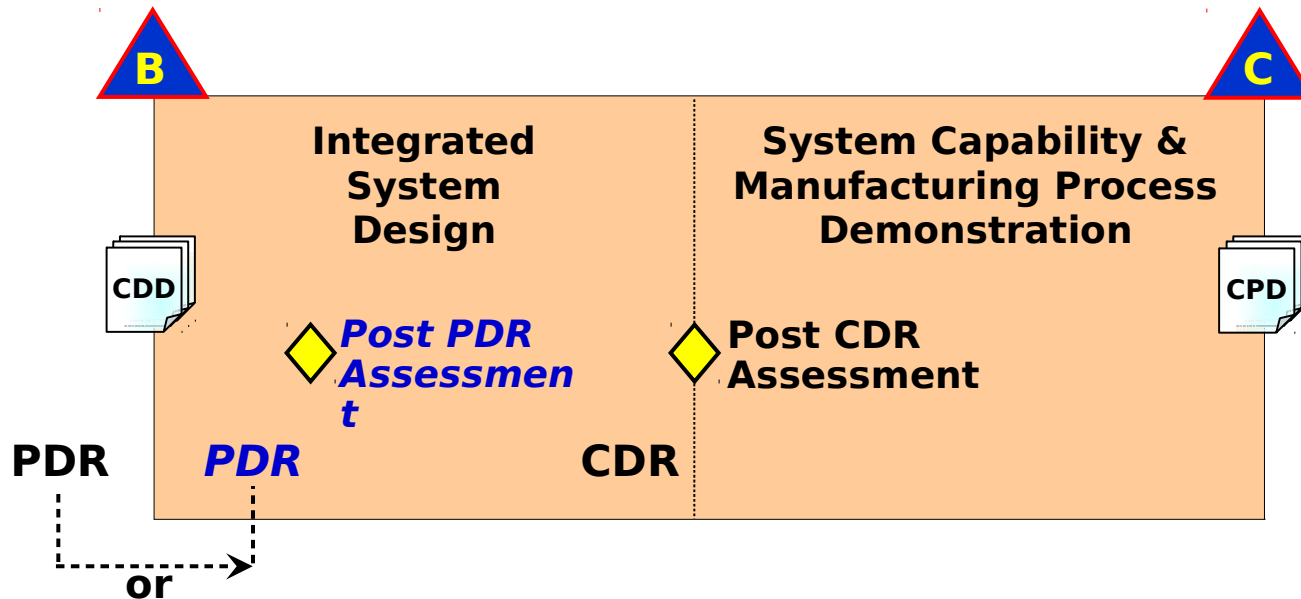
Old (2003)	New (2008)	Change from 2003
Concept Refinement (CR)	Material Solution Analysis	More robust AoA (result of changes to JCIDS)
Technology Development (TD)		Competitive prototyping
Systems Development & Demonstration (SDD)	Engineering & Manufacturing Development (EMD)	More robust system engineering

Preliminary Design Review



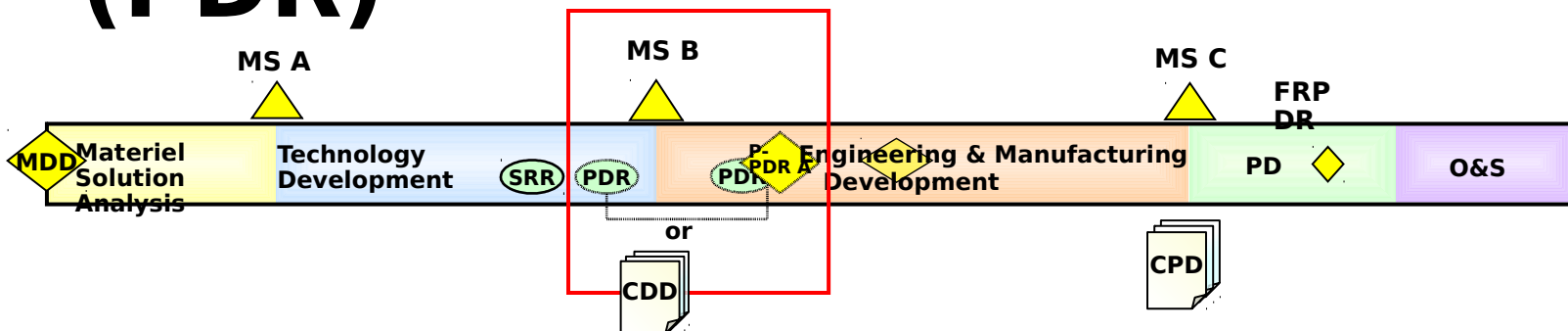
PDR Before Milestone B	PDR After Milestone B
<ul style="list-style-type: none"> • Planned for in Technology Development Strategy • PDR Report provided to MDA at MS B • Includes recommended requirements trades 	<ul style="list-style-type: none"> • Planned for in Acquisition Strategy • PDR Report provided to MDA prior to Post PDR Assessment • Reflects requirements trades • At Post PDR Assessment, MDA considers PDR report; determines action(s) required to achieve APB objectives and issues ADM

EMD Work Efforts



Old (2003)	New (2008)	Change from 2003
System Integration	Integrated System Design	Establishment of Product Baseline for all Configuration Items
System Demonstration	System Capability & Manufacturing Process Demonstration	Manufacturing processes effectively demonstrated; production-representative article(s) demonstrated in intended environment; T&E assesses improvements to mission capability and operational support based on user needs.

Preliminary Design Review (PDR)



PDR Before Milestone B

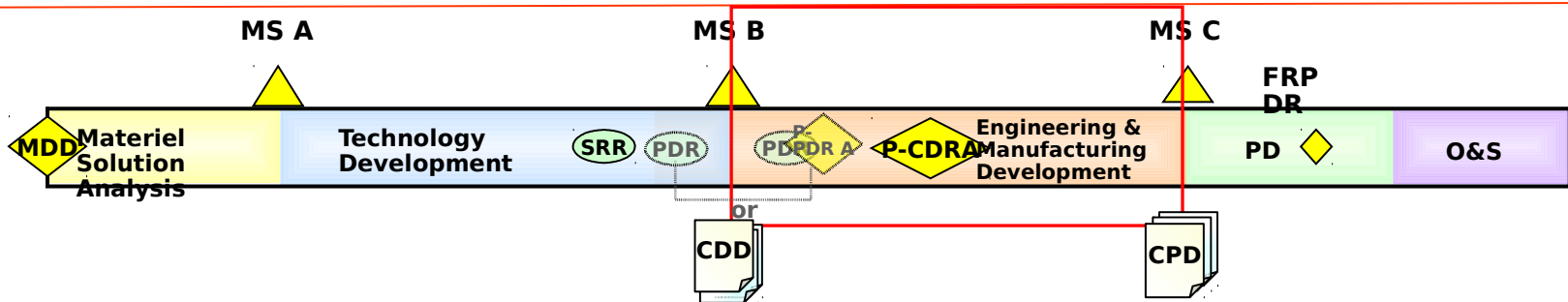
or

PDR after B and Post-PDR Assessment

"When consistent with technology development phase objectives, associated prototyping activity, and the MDA approved TDS, the PM shall plan a Preliminary Design Review (PDR) before Milestone B. PDR planning shall be reflected in the TDS and shall be conducted for the candidate design(s) to establish the allocated baseline (hardware, software, human/support systems) and underlying architectures and to define a high-confidence design. All system elements (hardware and software) shall be at a level of maturity commensurate with the PDR entrance and exit criteria. A successful PDR will inform requirements trades; improve cost estimation; and identify remaining design, integration, and manufacturing risks. The PDR shall be conducted at the system level and include user representatives and associated certification authorities. The PDR Report shall be provided to the MDA at Milestone B and include recommended requirements trades based upon an assessment of cost, schedule, and performance risk."

"Post-PDR Assessment (P-PDR A). If a PDR has not been conducted prior to Milestone B, the PM shall plan for a PDR as soon as feasible after program initiation. PDR planning shall be reflected in the Acquisition Strategy and conducted consistent with the policies specified in paragraph 5.d.(6). Following PDR, the PM shall plan and the MDA shall conduct a formal Post-PDR Assessment. The PDR report shall be provided to the MDA prior to the assessment and reflect any requirements trades based upon the PM's assessment of cost, schedule, and performance risk. The MDA will consider the results of the PDR and the PM's assessment, and determine whether remedial action is necessary to achieve APB objectives. The results of the MDA's Post-PDR Assessment shall be documented in an ADM."

EMD Phase

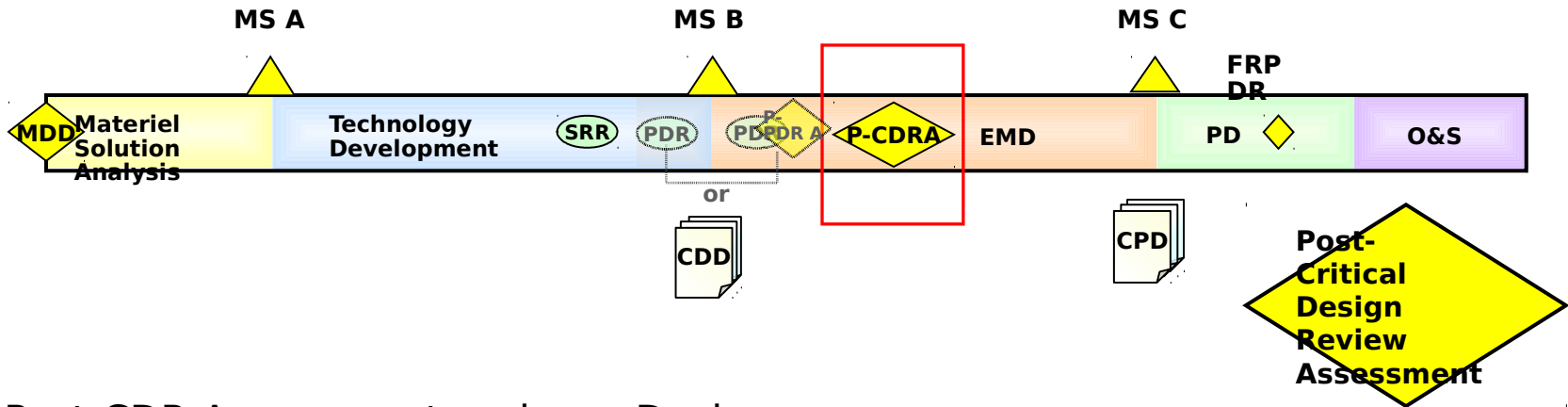


"The purpose of the EMD phase is to develop a system or an increment of capability; complete full system integration (technology risk reduction occurs during Technology Development); develop an affordable and executable manufacturing process; ensure operational supportability with particular attention to minimizing the logistics footprint; implement human systems integration; design for producibility; ensure affordability; protect CPI by implementing appropriate techniques such as anti-tamper; and demonstrate system integration, interoperability, safety, and utility. The Capability Development Document, Acquisition Strategy, Systems Engineering Plan, and Test and Evaluation Master Plan shall guide this effort."

"Integrated System Design. This effort is intended to define system and system-of-systems functionality and interfaces, complete hardware and software detailed design, and reduce system-level risk. Integrated System Design shall include the establishment of the product baseline for all configuration items."

"System Capability and Manufacturing Process Demonstration. This effort is intended to demonstrate the ability of the system to operate in a useful way consistent with the approved key performance parameters and that system production can be supported by demonstrated manufacturing processes. The program shall enter System Capability and Manufacturing Process Demonstration upon completion of the Post-Critical Design Review Assessment and establishment of an initial product baseline. This effort shall end when the system meets approved requirements and is demonstrated in its intended environment using the selected production-representative article; manufacturing processes have been effectively demonstrated in a pilot line environment; industrial capabilities are reasonably available;

Post-CDR Assessment



- Post-CDR Assessment replaces Design Readiness Review.
- Review considers whether, based on the Program Manager's report, the program is able to provide capability consistent with the Acquisition Program Baseline approved at Milestone B.
- The MDA determines whether (1) an adjustment should be made, or (2) the program should be permitted to proceed without change.

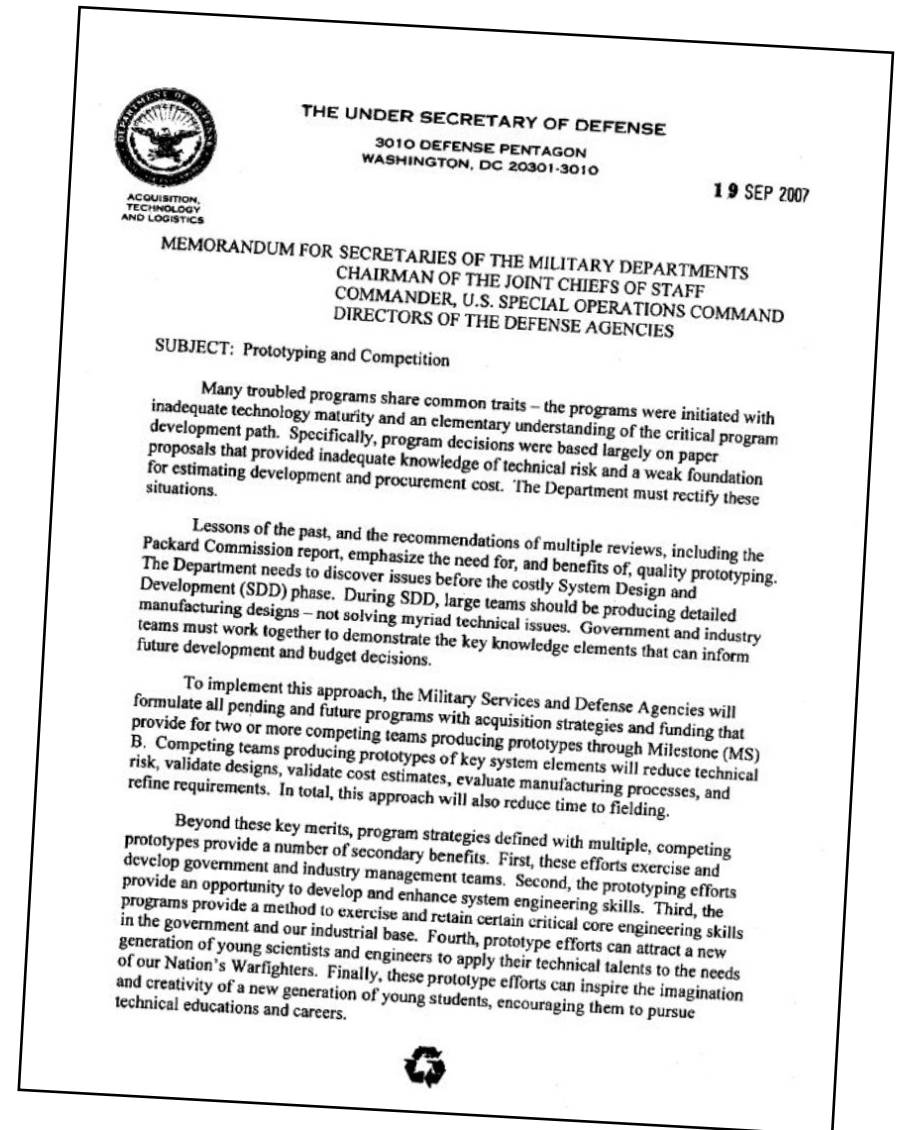
"The MDA shall conduct a formal program assessment following system-level CDR. The system-level CDR provides an opportunity to assess design maturity as evidenced by measures such as: successful completion of subsystem CDRs; the percentage of hardware and software product build-to specifications and drawings completed and under configuration management; planned corrective actions to hardware/software deficiencies; adequate developmental testing; an assessment of environment, safety and occupational health risks; a completed failure modes and effects analysis; the identification of key system characteristics; the maturity of critical manufacturing processes; and an estimate of system reliability based on demonstrated reliability rates."

Prototyping and Competition

“Evolutionary acquisition requires . . .

Technology development preceding initiation of an increment shall continue **until the required level of maturity is achieved, and prototypes of the system or key system elements are produced . . .**”

“The TDS and associated funding shall provide for two or more competing teams producing prototypes of the system and/or key system elements prior to, or through, **Milestone B**. Prototype systems or appropriate component-level prototyping shall be employed to reduce technical risk, validate designs and cost estimates, evaluate manufacturing processes, and refine requirements. . . .”

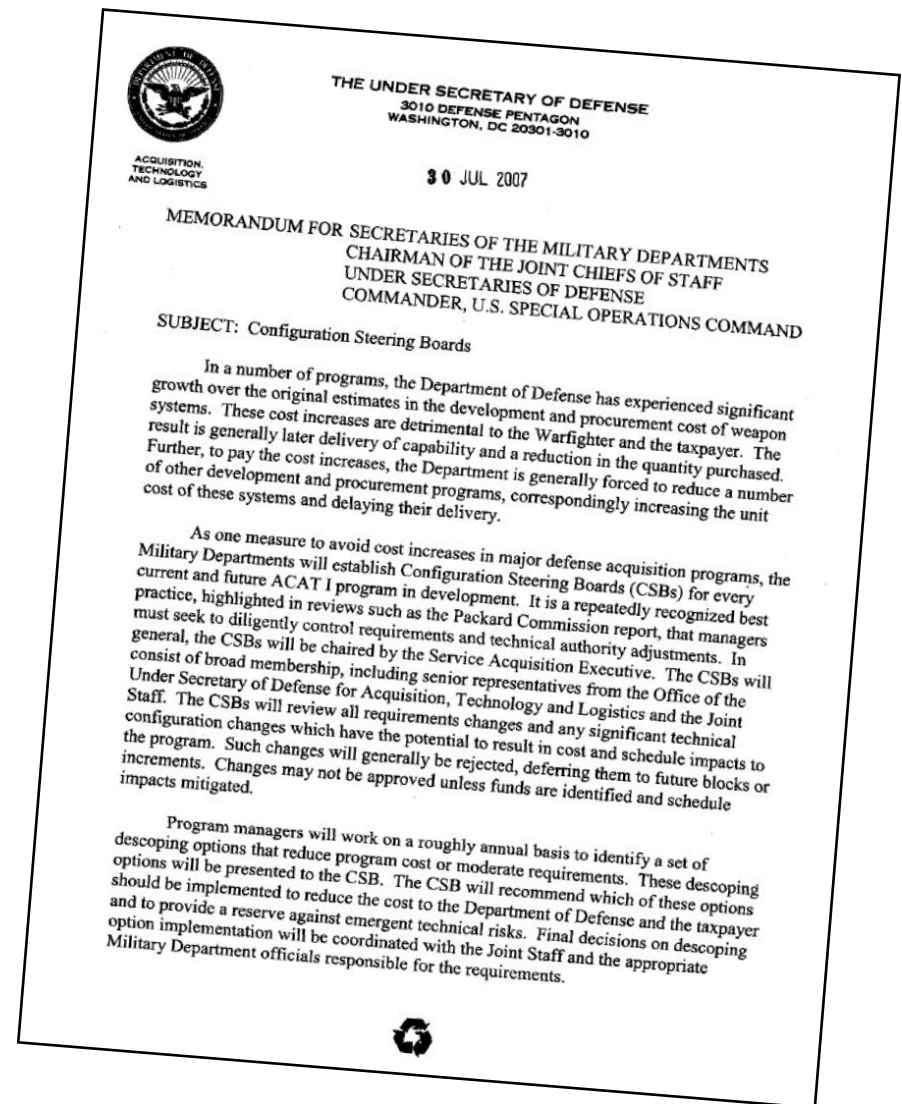


Configuration Steering Boards

Configuration Steering Boards (CSB). The Acquisition Executive of each DoD Component shall establish a CSB with broad executive membership including senior representatives from the Office of the USD(AT&L) and the Joint Staff.

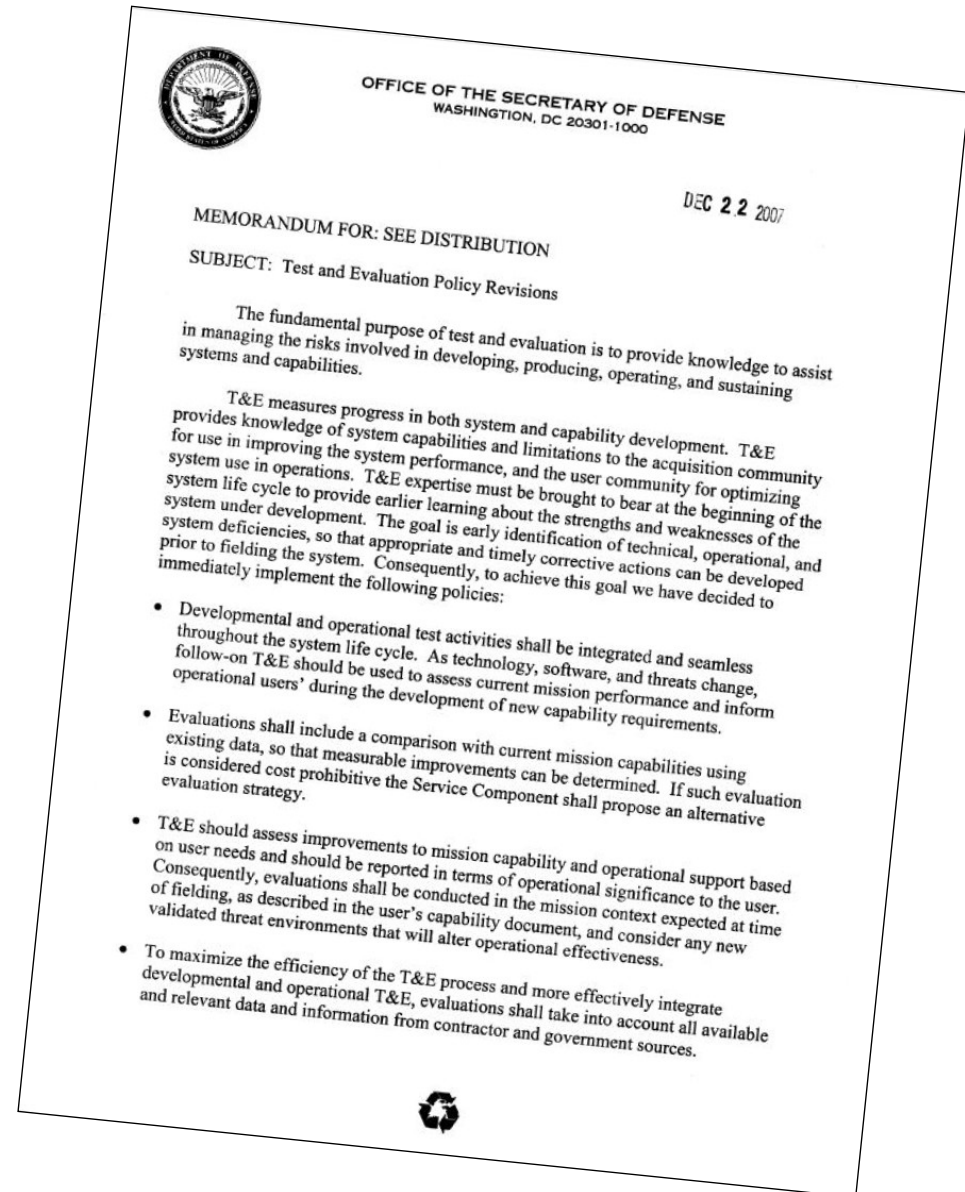
- The CSB shall meet at least once annually to review all requirements changes and any significant technical configuration changes for ACAT I and IA programs in development that have the potential to result in cost and schedule impacts to the program. Such changes will generally be rejected, deferring them to future blocks or increments. Changes shall not be approved unless funds are identified and schedule impacts mitigated.

- The PM, in consultation with the PEO, shall, on a roughly annual basis, identify and propose a set of de-scoping options, with supporting rationale addressing operational implications, to the CSB that reduce program cost or moderate requirements. The CSB shall recommend to the MDA (if an ACAT ID or IAM program) which of these options should be implemented. Final decisions on de-scoping option implementation shall be coordinated with the Joint Staff and

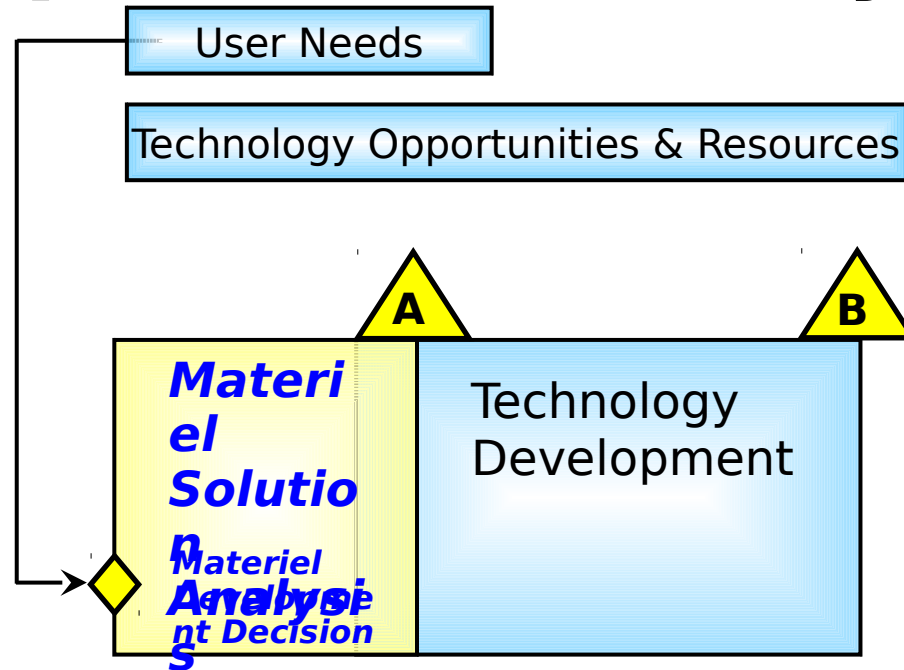


Test and Evaluation

- Integrated DT&E / OT&E activities
- Evaluations include comparison with current capability
- Evaluations conducted in the expected “mission context”



Pre-Systems Acquisition Activity



User Need

- JCIDS Capabilities-Based Assessment (CBA)
- Initial Capabilities Document (ICD)

Technology Opportunities

- All sources foreign & domestic
- Small Business Innovative Research (SBIR)
- Technology Projects: JCTDs, Coalition Warfare Program, Defense Acquisition Challenge

Materiel Development Decision

MDA:

- Approves AoA Study Guidance
- Determines acquisition phase of entry
- Identifies initial review milestone
- Designates Lead DoD Component
- Approves Acquisition Decision

Memorandum(ADM)

Regulatory Requirements

- Initial Capabilities Document (ICD)
- AoA Study Guidance (AoA Plan due immediately following the MDD)

Material Solution Analysis

Purpose:

Assess
potential
materiel
solutions



- **Enter:** Approved ICD and study guidance for conducting AoA.
- **Activities:** Conduct AoA, develop Technology Development Strategy (TDS) & draft CDD
- **Guided by:** ICD and AoA Plan
- **Exit:** Materiel solution to capability need in ICD recommended by lead Component conducting AoA, and phase-specific exit criteria have been satisfied

New Terms/Requirements in blue

Milestone A

MDA approves:

- Materiel solution
- Technology Development Strategy (TDS)
- Exit criteria for next phase
- Milestone A Certification (10 USC 2366a)

Statutory & Regulatory Requirements

- | | |
|--|--|
| <ul style="list-style-type: none"> • Acquisition Decision Memorandum (ADM) • Analysis of Alternatives (AoA) • Acquisition Information Assurance Strategy • Clinger-Cohen Act (CCA) Compliance • Clinger-Cohen Act Certification (MAIS) • CIO Confirmation of CCA Compliance for all non-MAIS IT • Consideration of Technology Issues • Component Cost Estimate (CCE) | <ul style="list-style-type: none"> • Exit Criteria • Initial Capabilities Document (ICD) • Item Unique Identification (IUID) Implementation Plan • Life Cycle Signature Support Plan • Market Research • MDA Program Certification • Program Protection Plan (PPP) • Systems Engineering Plan (SEP) • Technology Development Strategy (TDS) |
|--|--|

Milestone A Certification

A major defense acquisition program may not receive Milestone A approval, or Key Decision Point A approval in the case of a space program, until the MDA certifies, after consultation with the JROC on matters related to program requirements and military needs—

- (1) That the system fulfills an approved initial capabilities document;
- (2) That the system is being executed by an entity with a relevant core competency as identified by the Secretary of Defense under section 118b of Title 10, U.S. Code;
- (3) If the system duplicates a capability already provided by an existing system, the duplication provided by such system is necessary and appropriate; and
- (4) That a cost estimate for the system has been submitted and that the level of resources required to develop and

Technology Development



Purpose: Reduce technology risk, Demonstrate Critical Technology on Prototypes, Complete

Enter: MDA Design Improved materiel solution and TDS; funding for TD phase activities

Activities: Competitive prototyping; Develop RAM strategy; conduct Preliminary Design Review (PDR)

Guided by: ICD & TDS *and supported by SE planning*

Exit: Affordable increment of military-useful capability identified; technology demonstrated in relevant environment; manufacturing risks identified; *PDR conducted for candidate solutions*; system or increment ready for production within short time frame (normally less than 5 years *for weapon systems*)

Milestone B

MDA approves:

- Program Initiation (for most programs)
- Entry into **EMD**
- Acquisition Strategy
- Acquisition Program Baseline
- LRIP quantities
- Exit criteria for next phase
- **Type of Contract**
- **Milestone B Certification (10 USC 2366b)**
New terms/requirements in *blue*
- ADM

MS B: Documentation

All programs except where noted (see encl. 4, DoDI 500.02)

- | | |
|---|---|
| <ul style="list-style-type: none"> • Acquisition Decision Memorandum (ADM) • Analysis of Alternatives (AoA) (update) • Acquisition Strategy • Affordability Assessment • Acquisition Program Baseline • Acquisition Information Assurance Strategy • Alternate Live Fire T&E Plan • Benefit Analysis & Determination • Capability Development Document (CDD) • Title 40/Clinger-Cohen Act (CCA) Compliance • Title 40/Clinger-Cohen Act Certification (MAIS) • CIO Confirmation of CCA Compliance (non-MAIS IT) • Consideration of Technology Issues (ACAT I & II) • Competition Analysis • Component Cost Estimate (CCE) (MAIS) • Cooperative Opportunities • Core Logistics Analysis/Source of Repair Analysis • Cost Analysis Requirements Description (CARD) (MDAP & MAIS) • Corrosion Prevention Control Plan • Data Management Strategy (in acquisition strategy) • Economic Analysis (MAIS) • Exit Criteria • Initial Capabilities Document (ICD) | <ul style="list-style-type: none"> • Information Support Plan (ISP) • Industrial Base Capabilities (MDAP) • Item Unique Identification Impl Plan (SEP annex) • Live Fire T&E Waiver • Life Cycle Sustainment Plan (LCSP) • Life Cycle Signature Support Plan • LRIP Quantities (ACAT I & II) • Manpower Estimate (MDAP) • Market Research • MDA Program Certification • MDA Assessment of compliance with Chemical, Biological, Radiological, and Nuclear Survivability Requirements • Net-Centric Data Strategy (in ISP) • Operational Test Agency OT&E Report • Preliminary Design Review Report • Program Protection Plan (PPP) • Programmatic Environmental Safety & Occupational Health Evaluation (PESHE) • Replaced System Sustainment Plan (MDAP) • Selected Acquisition Report (SAR) (MDAP) • Spectrum Supportability Determination • Systems Engineering Plan (SEP) • System Threat Assessment Report (STAR) (ACAT I) • System Threat Assessment (ACAT II) • Technology Readiness Assessment (TRA) • Test & Evaluation Master Plan (TEMP) |
|---|---|

Milestone B Certification (10 US 2366b)

MDA Certifies at Milestone B

- 1) Program is Affordable When Considering Unit Cost and Total Acquisition Cost During FYDP**
- 2) Program is Affordable When Considering Ability of DOD to Accomplish Program's Mission Using Alternative Systems**
- 3) Reasonable Cost and Schedule Estimates have been Developed**
- 4) Funding is Available to Execute Development and Production Through the Period Covered by the FYDP**
- 5) Appropriate Market Research has been Conducted**
- 6) DoD Completed an Analysis of Alternatives**
- 7) JROC has Accomplished Its Duties**
- 8) Technology Demonstrated in a Relevant Environment**
- 9) Program Demonstrates High Likelihood of Accomplishing Its Intended Mission**

Engineering & Manufacturing Development



- **Enter:** Mature Technology; Approved Requirements; Full Funding in FYDP
- **Activities:** Define System of System Functionality & Interfaces, Complete Detailed Design, System-Level PDR (as needed)/CDR, Establish Product Baseline,
- **Guided by:** CDD, Acq Strategy, SEP & TEMP

- **Enter:** Post-CDR Assessment and Establishment of initial Product Baseline
- **Activities:** Developmental Testing (DT) Assesses Progress Against Technical Parameters, and Operational Assessments (OA) Against CDD
- **Guided by:** CDD, Acq Strategy, SEP & TEMP
- **Exit:** System Demonstrated in Intended Environment using

Milestone C

MDA Approves:

- Updated Acquisition Strategy and Acquisition Program Baseline
- Entry into LRIP for systems that require a LRIP, into production or procurement for systems that do not require LRIP, or into limited deployment for MAIS programs or software intensive systems with no production components
- Exit criteria for LRIP if appropriate
- Acquisition Decision Memorandum

MS C: Documentation

All programs except where noted (see encl. 4, DoDI 5000.02)

Requirements

- | | |
|---|--|
| <ul style="list-style-type: none"> • Acquisition Decision Memorandum (ADM) • Analysis of Alternatives (AoA) (update) • Acquisition Strategy • Affordability Assessment • Acquisition Program Baseline • Acquisition Information Assurance Strategy • Benefit Analysis & Determination • Capability Production Document (CPD) • Title 40/Clinger-Cohen Act (CCA) Compliance • Title 40/Clinger-Cohen Act Certification (MAIS) • CIO Confirmation of CCA Compliance (non-MAIS IT) • Consideration of Technology Issues (ACAT I & II) • Competition Analysis • Component Cost Estimate (CCE) • Cooperative Opportunities • Core Logistics Analysis/Source of Repair Analysis • Cost Analysis Requirements Description (CARD) (MDAP & MAIS) | <ul style="list-style-type: none"> • Independent Technology Readiness Assessment (TRA) (ACAT ID) • Information Support Plan (ISP) • Industrial Base Capabilities (MDAP) • Item Unique Identification Plan (SEP annex) • Life Cycle Sustainment Plan (LCSP) • Life Cycle Signature Support Plan • Manpower Estimate (MDAP) • MDA Program Certification (if program initiation) • Military Equipment Valuation (in acquisition strategy) • Net-Centric Data Strategy (in ISP) • Operational Test Agency OT&E Report • Program Protection Plan (PPP) • Programmatic Environmental Safety & Occupational Health Evaluation (PESHE) • Selected Acquisition Report (SAR) MDAP (if re-baselined) • Spectrum Supportability Determination • Systems Engineering Plan (SEP) • System Threat Assessment Report (STAR) (ACAT I) |
|---|--|

Production & Deployment



Purpose: Achieve an operational Capability that



- **Enter:** Acceptable performance in DT & OA; mature software; no significant manufacturing risks; approved CPD; **refined integrated architecture**; acceptable interoperability and operational supportability; demonstration of affordability; fully funded; phased for rapid deployment.

- **Activities:** IOT&E, LFT&E and Interoperability Testing of Production-Representative Articles; **IOC possible**

- **Enter:** Beyond LRIP & LFT&E Reports (OSD T&E/LFT&E programs) Submitted to Congress
- **Activities:** Full-Rate Production; Fielding and Support of Fielded Systems; IOC/FOC

- **Guided by:** Acq Strategy & Life Cycle Sustainment Plan

- **Exit:** Full Operational Capability; Deployment

Full Rate Production Decision Review

MDA Approves:

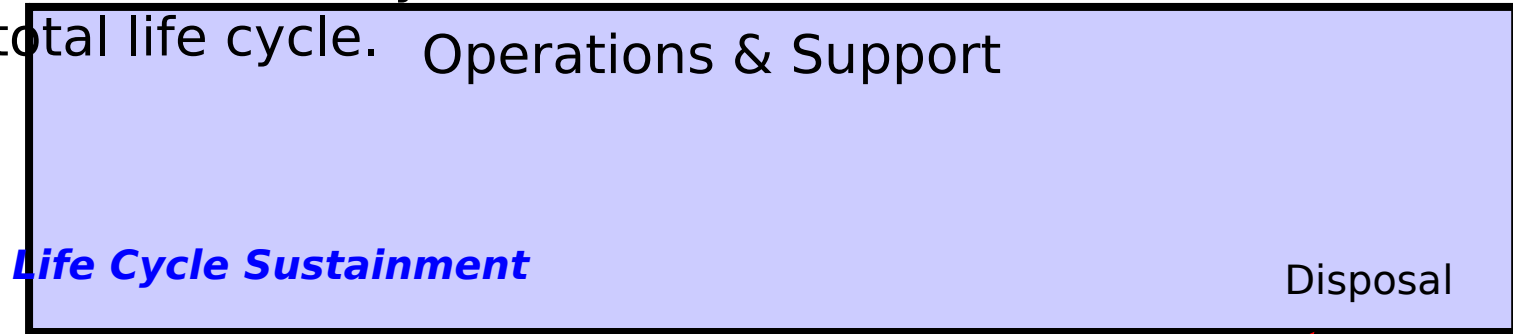
- Full-rate production
- Updated Acquisition Strategy
- Updated Acquisition Program Baseline
- Exit criteria, if appropriate
- Provisions for evaluation for post-deployment performance
- Acquisition Decision Memorandum (ADM)

Requirements

- | | |
|---|---|
| <ul style="list-style-type: none"> • Acquisition Decision Memorandum (ADM) • Analysis of Alternatives (AoA) (AIS only) • Acquisition Strategy • Acquisition Program Baseline • Acquisition Information Assurance Strategy • Beyond LRIP Report (DOT&E T&E Oversight Programs) • Title 40/Clinger-Cohen Act (CCA) Compliance • Title 40/Clinger-Cohen Act Certification (MAIS) CIO • Confirmation of CCA Compliance (all non-MAIS IT) • Component Cost Estimate (CCE) | <ul style="list-style-type: none"> • Exit Criteria • IT and NSS Joint Interoperability Test Certification (all IT including NSS) • IOT&E Completed ACAT I and II (conventional weapons systems for use in combat) • Independent Cost Estimate (ACAT I) (if MDA requests) • Life Cycle Sustainment Plan (LCSP) • Live Fire T&E Report (OSD LFT&E Programs) • Manpower Estimate (MDAP) • Military Equipment Valuation (part of Acquisition Strategy) • Operational Test Agency OT&E Report • Post Implementation Review • Programmatic Environmental Safety & Health (PESHE) • Test & Evaluation Master Plan (TEMP) |
|---|---|
- New terms/requirements in blue**

Operations & Support

Purpose: Execute a support program that meets materiel readiness and operational support performance requirements, and sustains the system in the most cost-effective manner over its total life cycle.



- **Entrance:** Approved CPD; approved LCSP; successful FRP Decision
- **Activities:** Performance-Based Life-Cycle Product Support (PBL) planning, development, implementation, and management; initiate system modifications as necessary;

- **Activities:** Demilitarize and Dispose of Systems IAW Legal and Regulatory Requirements, Particularly Environmental Considerations and Explosives Safety
- **Guided by:** Programmatic Environment, Safety, and

New Policy Directed by Congress

- Military Equipment Valuation
(accounting for military equipment)
- MDA Certification at Milestones A & B
- Cost type contract for EMD Phase requires written determination by MDA
- Lead Systems Integrator Restrictions
- Replaced System Sustainment Plan
- Configuration Steering Boards (CSBs)

New Policy Directed by Congress

- New MAIS Reporting Requirements
- “Time-Certain” IT Business Systems Development
- Defense Business Systems Oversight
- MDA assessment of compliance with chemical, biological, radiological, and nuclear survivability (CBRN) requirements at Milestones B and C

New Policy Directed by Congress

- Detailed Acquisition of Services Policy
- Independent management reviews (Peer Reviews) for supplies and services contracts
- Interim Beyond LRIP Report
- DOT&E's Role in Testing Force Protection Equipment / Non-Lethal Weapons
- Nunn-McCurdy breach / APB Revision Procedure

New or Revised

Regulatory Policy

- Detailed Systems Engineering Policy
- Program Support Reviews (PSRs)
- Integrated Test & Evaluation
- Restricted use of performance requirements that do not support KPPs
- Comparison with current mission capabilities during OT&E
- Assessment of Operational Test Readiness (AOTR)
- Life-Cycle Sustainment Plan (LCSP)
- Cost of energy in AoA and resource

New or Revised

Regulatory Policy

- Contract Incentives Strategy
- Contracting for Operational Support Services
- Approval of Technology Development Strategy prior to Release of final RFP for Technology Development Phase
- Approval of Acquisition Strategy prior to release of final RFP for EMD or any succeeding phase.
- Reliability, Availability, and Maintainability (RAM) strategy
- Data Management Strategy

Enclosures to DoDI 5000.02

- 1 References
- 2 Procedures
- 3 ACAT and MDA
- 4 Statutory and Regulatory Information
and Milestone Requirements
Table 5. EVM Implementation Policy
Table 6. APB Policy
Table 7. Unique Decision Forums
- 5 IT Considerations
- 6 Integrated T&E
- 7 Resource Estimation
- 8 Human Systems Integration
- 9 Acquisition of Services
- 10 Program Management
- 11 Management of Defense Business
Systems

} Tables
Updated

Questions



BACK-UP SLIDES

Changes to Encl 5, IT Consideration

- “Title 40/CCA” replaces term CCA. Subtitle III of Title 40, US Code was formerly known as Division E of the Clinger-Cohen Act
- Table E.4.T1 slightly modified for readability
- Added:
 - Investment Review Board (IRB) role as “OIPT” for MAIS and MDAP business systems
 - Time-Certain Acquisition of IT Business Systems (No MS A approval unless can achieve IOC within 5 years)
 - Defense Business System Management Committee (DBSMC) Certification approval for business systems with modernization funding over \$1 million – prior to any milestone or FRP approval
 - DoD CIO notification to Congress 60 days before any MDA cancels or significantly reduces size of MAIS fielded or has received MS C approval

• Revised: USD(Comptroller) certification for Defense

Changes to Encl 6, Test & Evaluation

- PM, in concert with user and test community, must provide safety releases to developmental and operational testers prior to any test using personnel
- Systems that provide capabilities for joint missions must be tested in joint operational environment
- Embedded instrumentation must be developed to facilitate training, logistics support and combat data collection
- Joint Interoperability Test Command (JITC), “regardless of ACAT” will provide interoperability test certification memoranda to J-6

Changes to Encl 6, Test & Evaluation

- OUSD(AT&L), Dir Systems Software and Engineering will conduct an independent Assessment of Operational Test Readiness (AOTR) for ACAT ID and special interest programs designated by USD(AT&L). CAE will consider AOTR prior to making determination of materiel readiness for IOT&E
- OSD T&E Oversight List categories: developmental testing, operational testing or live fire testing. Programs on list designated for OT or live fire testing will be considered same as MDAPs or covered programs and subject to all provisions of Title 10, US Code and DoDI 5000.02

Changes to Encl 7, Resource Estima

- PMs must use Cost and Software Data Reporting System to report data on contractor costs and resource usage
- CARD must be in sync with other program documents, and at MS B CARD must reflect results of the PDR.
- Fully burdened cost of delivered energy must be used in trade-off analysis for all tactical systems with end items that create a demand for energy
- Following areas of assessment added to AoA:
 - Alternative ways to improve the energy efficiency of DoD tactical systems consistent with mission and cost effectiveness

Changes to Encl 8, Human Systems

- Mix of military, DoD civilian, and contractor support to operate, maintain and support (including training) system must be determined based on Manpower Mix Criteria and reported in Manpower Estimate
- Economic analyses to support workforce mix decisions must use tools that account for all variable and fixed costs, compensation and non-compensation costs, current and deferred benefits, cash and in-kind benefits
- Details on Environment, Safety and Occupational Health (ESOH) moved to new

Changes to Encl 9, Acquisition of Services

- Planning for acquisition of services must consider:
 - Requirements development and management
 - Acquisition planning
 - Solicitation and contract award
 - Risk management
 - Contract tracking and oversight
 - Performance evaluation
- Special procedures for IT services that cost over \$500M, all services that cost over \$1B, and special interest programs designated by ASD(NII), USD(AT&L) or their designees:
 - Senior officials/decision authorities must be notified prior to issuing final solicitation (briefing or written)
 - ASD(NII)/DoD CIO notifies USD(AT&L) of any proposed acquisition of IT services over \$1B
 - Review by ASD(NII)/USD(AT&L) initiates review of acquisition strategy – final RFPs cannot be released

Changes to Encl 9, Acquisition of Se

- Policy extended to services acquired after program achieves Full Operational Capability (FOC), if those services were not subject to previous milestones
- Policy does not apply to R&D activities, or services that are approved part of an acquisition program managed IAW DoDI 5000.02
- Senior Officials and decision authorities may apply policy to R&D services at their discretion
- SAEs are Senior Officials for acquisition of services
- USD(AT&L) is Senior Official for acquisition of services for Components outside of military departments – he may delegate decision authority to commanders/ directors of these components
- Independent management reviews (Peer Reviews) required for contracts of \$1B or more

Changes to Encl 9, Acquisition of Services

Acquisition of Services Categories (Table)

Category	Threshold	Decision Authority
Acquisitions > \$1B	Any services acquisition with total estimated cost of \$1B or more	USD(AT&L) or designee
IT Acquisitions > \$500M	IT services with total estimated cost of \$500M or more	ASD(NII)/DoD CIO or as designated
Special Interest	Designated by USD(AT&L), ASD(NII)/ DoD CIO, or any Mil Dept Senior Official	USD(AT&L) or Senior Officials
Services Category I	Services estimated to cost \$250M or more	Senior Officials or as designated
Services Category II	Services estimated to cost \$10M or more, but less than \$250M	Senior Officials or as designated
Services Category III	Services estimated to cost more than simplified acq threshold, but less than \$10M	Senior Officials or as designated

All dollars in FY 2006 constant year dollars

Changes to Encl 10, Program Management

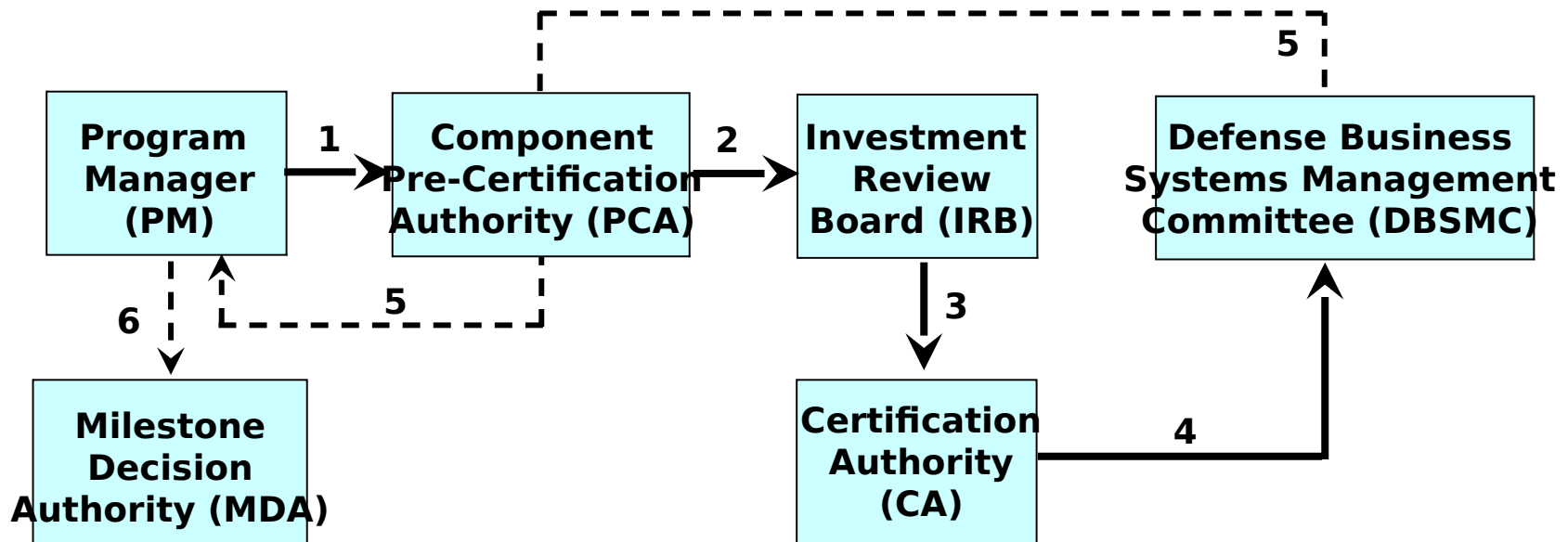
- Requires PMs for ACAT II and other significant non-major programs to be assigned for not less than 3 years.
- Program Management Agreements (PMAs) implemented to establish “contract” between PM and acquisition and resource officials
- Provides that waivers for PM/PEO experience and certifications “should be strictly avoided.”
- Provides for USD(AT&L) waiver for PEO’s to assume other command responsibilities
- Adds US-ratified materiel international

Encl 11, Mgt of Business Systems (

- Applies to “defense business systems” modernizations with total modernization or development funding exceeding \$1 million.
 - Defines Defense Business System as an information system, other than a national security system, operated by, for, or on behalf of DoD, including financial management systems, mixed systems, financial data feeder systems, and IT and information assurance infrastructure.
 - Defense Business Systems support activities such as acquisition, financial management, logistics, strategic planning and budgeting, installations and environment, and human resource

- Funds cannot be expended until the Defense Business System Management Committee (DBSMC) approves Investment Review Board Certification (IRB) that the system:
 - Is in compliance with the enterprise architecture; or Is necessary to achieve a critical national security capability or address a critical requirement in an area such as safety or security; or Is necessary to prevent a significant adverse impact on a project that is needed to achieve an essential capability

Business Systems Certification and Approval Process



1. PM completes economic viability review & other plans/analysis as requested by the PCA
2. PCA Validates info from PM, forwards certification request to appropriate IRB
3. IRB reviews request, IRB chair recommends appropriate approval authority sign certification memo and request DBSMC approval
4. CA sends signed certification memo to DBSMC for approval
5. DBSMC Chair approves certification and sends decision to the PM through the PCA.
6. PM requests MDA conduct milestone review

- Systems Engineering Plan (SEP) required at each milestone
- MDA is approval authority for the SEP
- For programs where USD(AT&L) is MDA, and programs on the DT-only portion of OSD T&E Oversight List, SEPs must be submitted to Director, Systems and Software Engineering 30 days prior to DAB/ITAB review
- PEOs must have lead systems engineer – oversees SE across PEOs portfolio; reviews SEPs; assesses performance of subordinate systems engineers with PEO and PM
- Event-driven technical reviews required – with SMEs independent of program, unless waived by MDA

- ESOH risk management required to be integrated with overall SE process; Programmatic ESOH Evaluation (PESHE) required of all programs regardless of ACAT
- NEPA and EO 12114 (Environmental Effects Abroad of Major Federal Actions) analysis required of PM, approved by CAE
- Addresses PM support of Mishap Accident Investigations
- Requires Corrosion Prevention Control Plan for ACAT I programs at MS B and C
- Requires PMs to employ modular open systems approach to design
- Data Management Strategy (DMS) required to